

ABSTRACT

An optical wavelength converter that includes an optical sum frequency generator (SFG) and an optical difference frequency generator (DFG). The SFG receives part of both an input beam and a continuous-wave (CW) beam. The DFG receives part of the input beam as well as the output of the SFG. The output of the DFG represents the signal of the input beam modulated or carried on a beam having the frequency of the CW beam. Both single-channel and multi-channel configurations are integrally realized in similar numbers of components.

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